

PATENT COOPERATION TREATY

Deborah F. Fisher

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

To:
JESSICA M. SINNOT
E. I. DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
4417 LANCASTER PIKE
WILMINGTON, DE 19805

RECEIVED
PATENT RECORDS CENTER

Date of mailing
(day/month/year) **29 APR 2005**

Applicant's or agent's file reference
CL2125PCT

MAY 04 2005

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US04/10710

International filing date
(day/month/year) 07 April 2004 (07.04.2004)

Applicant
E. I. DU PONT DE NEMOURS AND COMPANY

**TO BE REVIEWED
BY ATTORNEY**

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: +41 22 740 14 35

MAY 06 2005

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/ US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Wenpeng Chen

Telephone No. 571 272-7431

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CL2125PCT	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US04/10710	International filing date (<i>day/month/year</i>) 07 April 2004 (07.04.2004)	(Earliest) Priority Date (<i>day/month/year</i>) 07 April 2003 (07.04.2003)	
Applicant E. I. DU PONT DE NEMOURS AND COMPANY			

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).



- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the drawings to be published with the abstract is Figure No. 1



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.

- b. ☐

none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10710

Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

NEW ABSTRACT

An image analysis method and apparatus (10) having an imaging assembly (12) and a processor (14) to quantify visual showthrough of printed images on the reverse face of planar objects, such as paper. An illumination level is set using a white reference object. A white reference image is stored in a computer memory. An image of a planar object having a printed image on the reverse face is stored in a computer memory. A pixel by pixel ratio of the two images is calculated and a mean value of the ratios is calculated to characterize the visual showthrough. The measurements are substantially independent of both the illumination level and image shading.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10710

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06K 9/00; G01N 21/00, 21/84

US CL : 382/141; 356/435, 429

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 382/141, 108, 112,2 86; 356/435, 429, 432, 433, 434, 440, 445, 234, 236

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO98/20326 (RUBIN et al) 14 May 1998 (14.05.1998), whole document.	1-18
A	US 6,081,612 A (GUTKOWICZ-KRUSIN et al) 27 June 2000 (27.06.2000), whole document.	1-18
A	US 20040021869 A1 (SHAKESPEARE et al) 05 February 2004 (05.02.2004), whole document.	1-18
A	US 5,793,486 A (GORDON et al) 11 August 1998 (11.08.1998), whole document.	1-18
A	US 5,082,529 A (BURK) 21 January 1992 (21.01.1992), whole document.	1-18
A	US 3,455,637 A (HOWARD) 15 July 1969 (15.07.1969), whole document.	1-18
A	US 3,827,808 A (CHO) 6 August 1974 (06.08.1974), whole document.	1-18
A	HO. T. et al Applying Digital Image Technology to Pulp and Paper, Canadian Conference on Electrical and Computer Engineering, 14-17 September 1993, Vol. 2, pages 1139-1143, whole document.	1-18



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

12 April 2005 (12.04.2005)

Date of mailing of the international search report

29 APR 2005

Name and mailing address of the ISA/US

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Commissioner for Patents
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International application No.
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Continuation of B. FIELDS SEARCHED Item 3:
EAST, IEEE Xplore, Google
search terms: seethrough, showthrough, opacity, paper, sheet, dark-current